

1085277886

Rec'd PCT/PTO 11 MAR 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 March 2004 (25.03.2004)

PCT

(10) International Publication Number
WO 2004/024893 A2

(51) International Patent Classification⁷:

C12N

(21) International Application Number:

PCT/US2003/029281

(22) International Filing Date:

15 September 2003 (15.09.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/410,846 13 September 2002 (13.09.2002) US

(71) Applicant (for all designated States except US): UNIVERSITY OF CALIFORNIA LOS ANGELES [US/US]; 12th Floor, 1111 Franklin Street, Oakland, CA 94607-5200 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): KANG, Ting [CN/US]; 115 N. Doheny Drive, Beverly Hills, CA 90211 (US).

(74) Agent: BROWN, E., Marc, Esq.; McDermott, Will & Emery, 2049 Century Park East, Suite 3400, Los Angeles, CA 90067 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 2004/024893 A2

(54) Title: NELL-1 ENHANCED BONE MINERALIZATION

(57) Abstract: This invention pertains to the discovery that the human NELL-1 gene induces or upregulates bone mineralization. The NELL-1 gene or gene product thus provides a convenient target for screening for modulators of bone mineralization. In addition, NELL-1 can be used to facilitate repair of bone fractures and/or to generally increase bone density.